Annex A -- Goals, Objectives and Actions

<u>**GOAL 1 -- CONNECT THE WARFIGHTER:**</u>

1.1 **Develop Strategies for Warfighters Beyond Line-of-Sight Needs to Include a Balance Between Military and Commercial Satellite Communications (SATCOM) and Alternatives to Space-Based Capabilities.**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: The community needs to partner with all relevant organizations to ensure programs meet joint capability requirements, remain on-schedule and control costs. In addition, the community must continue to research and advocate for technologies that possess military application. Identification and evaluation of new technologies must include technology readiness level, cost-benefit and risk assessments. The community must also analyze commercial and military SATCOM needs as well as conduct a review of all satellite requirements to ensure the accuracy of the SATCOM database (SDB).

Actions:

1.1.1 Ensure SATCOM capabilities meet joint warfighting requirements. (Office of Primary Responsibility (OPR): Joint Staff/J-6C -- recurring quarterly until system full operational capability).

1.1.2 Employ user and senior warfighter fora to solicit end-user input to potential program of record adjustments. (OPR: Joint Staff/J-6C (working with Program Management Offices) -- 1QFY08).

1.1.3 Ensure SATCOM systems support joint integrating architectures and Joint Concepts. (OPR: Joint Staff/J-6C, Network Centric Functional Capabilities Board (NC FCB) -- 2QFY07).

1.1.4 Review SATCOM acquisition and fielding strategies in support of annual operational availability directed by SPG (OPR: Defense Information Systems Agency (DISA) -- recurring annually).

1.1.5 Conduct SATCOM database (SDB) process review to improve / streamline the requirements validation and approval process. (OPR: Joint Staff/J-6C -- 2QFY07).

1.1.6 Modify SDB to ensure accurate characterization of IP and net-centric system requirements. (OPR: DISA -- 4QFY08).

1.2 **Orchestrate Collection, Validation, and Implementation of Joint Warfighting Capabilities Into Existing Information Infrastructure and the Defense Information Systems Network (DISN).**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: Transition to the new DISN infrastructure requires the formal documentation of various processes. Additionally, the community must

support secure and seamless communication with non-DOD agencies, especially in times of crises and comply with Presidential directives regarding information sharing.

Actions:

1.2.1   Develop and document the DISN Subscription Services (formerly Enhanced Planning Process) (OPR: DISA -- 2QFY07).

1.2.2   Develop and implement the plan for transition to the next DISN infrastructure.   (OPR: DISA -- 3QFY08).

1.2.3   Assess requirements for redundant (back-up) systems and diverse network routing.   (OPR: Joint Staff/J-6C, DISA -- 1QFY09).

1.3   **Develop Joint Wireless Capabilities to Support DOD Joint Net-centric Operations (JNO).**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: Joint wireless capabilities will connect tactical units to the Global Information Grid (GIG), enabling mission partners to share near-real-time voice, data and video communications.   To facilitate the development and deployment of wireless capabilities, concept of operations (CONOPS) and interoperability standards need to be created and new technologies (such as the Joint Tactical Radio System (JTRS), an IP-based, software definable radio set) need to be fielded.

Actions:

1.3.1   Develop joint wireless CONOPS to articulate DOD expectations. (OPR: Joint Staff/J-6C -- 4QFY08).

1.3.2   Facilitate JTRS requirements definition and incremental delivery of capability to understand capability gap, overlaps and to facilitate dependencies.   (OPR: Army/J-6C -- 4QFY08).

1.4   **Resolve Interoperability and Integration Issues Occurring Within the Operational Environment.**

Joint Staff Division Lead: J-6I

OBJECTIVE DETAILS: Lessons learned from recent operations and DOD exercises provide critical feedback on system interoperability. OSD Operational Test and Evaluation Directorate (DOT&E) and Joint Staff/J-6 will team to provide interoperability assessments during annual combatant command, Service and agency (C/S/A)-sponsored exercises and identify shortfalls.

Actions:

1.4.1   Establish a collaborative process to categorize shortfalls, identify potential solutions, and track resolution. (OPR: Joint Staff/J-6I -- 2QFY07).

1.4.2   Present, quarterly high priority issues identified by the "CIIT replacement" to a Senior Panel/MCEB. (OPR: Joint Staff/J-6I -- 2QFY07).

1.5   **Develop and Enforce Compliance of GIG Implementation Guidance to Enable JNO, Integration, and Data Sharing in Connecting to the GIG Enterprise.**

Joint Staff Division Lead: J-6I

OBJECTIVE DETAILS: GIG key interfaces are critical to the enterprise. Two important initiatives are key interface profile (KIP) development and net-centric implementation directives (NCIDs). The KIP Transport Family Version 1.0 is complete and ASD(NII) is developing NCIDs as systems engineering guidance. Data sharing is equally important to connecting the warfighter. DOD implementation of the Net-Centric Data Strategy (NCDS) will enable information sharing capabilities and ensure operationally effective information exchanges.

Actions:

1.5.1   Publish KIPs for Application Enterprise Services and Computing Infrastructure Families (OPR: DISA -- 4QFY07).

1.5.2   Develop KIP test and evaluation strategy and incorporate it in the Joint Interoperability Test Certification process. (OPR: DISA (JITC) -- 3QFY07).

1.5.3   Support Warfighting Mission Area (WMA) Implementation of DOD NCDS. (OPR: Joint Staff/J-6I -- 2QFY07).

1.6   **Maximize Support to Combatant Commanders Through Joint Programs, Processes, and Venues to Meet Rapidly Evolving Communications System Operational Requirements.**

Joint Staff Division Lead: J-6A/Z

OBJECTIVE DETAILS: According to the *2006 QDR Report,* the Department of Defense's current structure and processes are handicaps in the protracted fight against agile and networked foes. In order to maximize support to combatant commanders, the joint community must make better use of available tools and technology to respond to emerging warfighter needs.

Actions:

1.6.1   Work combatant command JNO Integrated Priority List (IPL) issues to ensure warfighters have the tools necessary for mission accomplishment. (OPR: Joint Staff/J-6A -- annually).

1.6.2   Execute the NC FCB's responsibilities for processing joint urgent operational needs (JUONs) within the applicable review and validation window. (OPR: Joint Staff/J-6A -- continuously).

1.6.3   Continuously assess Command and Control Initiative Program (C2IP) funds apportioned to combatant commands to ensure compliance with

C2IP guidelines. (OPR: Combatant commands, Joint Staff/J-6Z -- continuously).

1.6.4 Develop and sustain an overarching directive outlining the end-to-end (E2E) electro-magnetic interference (EMI) resolution process. (OPR: USSTRATCOM -- 3QFY07).

1.6.5 Develop a prioritized list of EMI sources that require resolution and reprioritize yearly. (OPR: USSTRATCOM, Joint Staff/J-6Z -- 2QFY07, then 2QFY annually).

1.6.6 Develop and sustain help guides within the J-6 web site to enable the joint community to use appropriate joint process to address communications system issues. (OPR: Joint Staff/J-6R -- continuously).

1.7 **Develop a Strategy and Validate Performance Testing with Delivery of Essential Network Services During DOD Migration to Internet Protocol Version 6 (IPv6).**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: The transition to IPv6 will be a gradual, market-based process. Industry's development, testing and distribution of IPv6 standards, equipment and services will dictate the pace of transition. The joint community will continue to support development of DISA's Master Test Plan, DISA and Service IPv6 implementation plans and capabilities to better understand the technical aspects of "IPv6 capable." As IPv6 continues to mature, the joint community will identify potential technical implementation issues, policy and doctrine implications and network management considerations.

Actions:

1.7.1 Develop and publish a DOD IPv6 Master Test Plan (MTP) and DOD IPv6 Transition Plan. (OPR: ASD(NII) -- 4QFY06).

1.7.2 Develop and publish DISA and Services' IPv6 Implementation Plan. (OPR: DISA, Services -- 4QFY06).

1.7.3 Staff and adjudicate Joint Staff IPv6 Operational Criteria (OPR: Joint Staff/J-6C -- 4QFY06).

1.7.4 Analyze and validate IPv6 performance testing results for essential network services. (OPR: Joint Staff/J-6C -- 1QFY08).

1.7.5 Provide recommendation to the Chairman of the Joint Chiefs of Staff on performance and capabilities of IPv6. (OPR: Joint Staff/J-6C -- 1QFY08).

GOAL 2 -- LEVERAGE THE POWER OF ENTERPRISE SERVICES:

2.1 **Develop Strategies, Facilitate Enabling Policy, and Provide Joint Guidance in Support of DOD Efforts to Transition to ES.**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: To realize net-centricity, the Joint Staff, C/S/As and the IC must work together to define, establish and synchronize requirements, policy and strategies to ensure that the future JNO supports evolving operational requirements. Key efforts include the Department of Defense working to: strengthen data strategies; develop an information sharing strategy with federal, state, local and coalition partners; and synchronizing net-centric investment portfolios.

Actions:

2.1.1   Update, review, and/or develop guidance to support the incorporation and execution of net-centric capabilities supporting the warfighter (OPR: Joint Staff/J-6 -- 4QFY08).

2.1.2   Participate in multiple Service and agency efforts as they define, analyze, develop, and deliver net-centric capabilities through a synchronized portfolio of programs. (OPR: Joint Staff/J-6C -- 4QFY08).

2.1.3   Determine how the Department of Defense and the IC will conduct organizational messaging now that the Defense Message System (DMS) is in sustainment. (OPR: Joint Staff/J-6C -- 2QFY07).

2.2   **Establish and Advocate Net-Centric Enterprise Service Capabilities Required to Support DOD JNO.**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: To realize net-centricity, the Joint Staff, C/S/As, and the IC must work together to define, establish, and synchronize operational requirements in the JNO.

Actions:

2.2.1   Work with the C/S/As and the IC to develop a comprehensive approach to capture NCES capabilities. (OPR: Joint Staff/J-6C -- 4QFY08).

2.2.2   Provide advocacy and guidance in the development and implementation of collaboration capabilities (OPR: Joint Staff/J-6 -- 4QFY08).

2.3   **Facilitate the Transition and Integration of DOD C2 and/or Shared Situational Awareness Efforts Into a Net-Centric Enabled Environment.**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: The Joint Staff/J-6 will monitor the Net-Enabled Command Capability (NECC) technology development (TD) phase to ensure that the migration of Global Command and Control System-Joint (GCCS-J) capability continues to provide appropriate IA, in accordance with the designated approval authority role of Joint Staff/J-6. Careful monitoring of NECC development during the TD phase is also necessary to assess the synchronization of the NECC

enterprise service requirements with the NCES core enterprise services (CES) capability.

Actions:

2.3.1   Staff and comment on the NECC CDD to ensure incorporation of required interoperability and supportability (I&S) parameters. (OPR: USJFCOM -- 2QFY08).

2.3.2   Monitor and enforce IA of GCCS-J during the migration of GCCS-J capability to the NECC program. (OPR: Joint Staff/J-6X -- 3QFY08).

2.3.3   Monitor the synchronization of the NECC and NCES program efforts to ensure NCES capabilities satisfy the NECC enterprise services (ES) requirements. (OPR: DISA -- 2QFY08).

2.4   **Develop Policy, Procedures, and Solutions to Ensure ES Capabilities are Sufficient and Available to Meet the Rapid Deployment and Employment of a JTF.**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: The community must continue to define functional, organizational and operational requirements for deployed joint C2 initiatives and programs of record. The *2006 Quadrennial Defense Report (QDR)* called for the transformation of designated Service operational headquarters to fully functional and scalable joint C2 JTF-capable headquarters beginning in FY 2007. This new guidance may influence current joint programs of record, such as the DJC2 System and incorporate new initiatives such as USJFCOM's "Turnkey Solution for Joint Headquarters."   The Joint Staff/J-6 must stay engaged in the ongoing process to determine future deployed C2 solutions for the joint warfighter.

Actions:

2.4.1   Provide direction and guidance to C/S/A in the employment of DEBS/JACC (OPR: DISA -- 4QFY07).

2.4.2   Provide strategic guidance for the Deployed Joint Command and Control program. (OPR: USJFCOM -- 4QFY07).

GOAL 3 -- SECURE THE NETWORK:

3.1   **Develop Strategies and Guidance to Strengthen and Synchronize DOD Efforts to Secure the Network.**

Joint Staff Division Lead: J-6X

OBJECTIVE DETAILS: Establishes DOD-level strategy and guidance to ensure appropriate protection of information during transmission, processing and storage. Protection is required for the level of risk, loss, or harm that could result from disclosure, loss, misuse, intentional or inadvertent destruction, or non-availability of DOD information. One key to this objective is the development of an

National Military Strategy for Cyberspace Operations (NMS-CO). The NMS-CO provides a comprehensive plan for the Department of Defense to orchestrate national military strategic actions needed to operate in cyberspace and ensure trust and confidence in cyberspace.

Actions:

3.1.1   Draft and staff the NMS-CO. (OPR: Joint Staff/J-6X -- 3QFY06).

3.1.2   Develop strategy to publicize the NMS-CO (OPR: Joint Staff Public Affairs Office -- 3QFY06).

3.1.3   Publish DOD instruction on DOD IA certification and accreditation process. (OPR: ASD(NII) -- 3QFY07).

3.1.4   Develop or update, coordinate, and publish joint DISN policy, responsibilities, and processes (OPR: Joint Staff/J-6X -- 4QFY07).

3.1.5   Develop, coordinate, and publish update for DOD Instruction (DODI) 8500.2 IA controls for use in system certification and accreditation (OPR: ASD(NII) -- 1QFY08).

3.1.6   Develop DOD policy and guidance for CIP to include standard criteria assessing critical infrastructure protection (CIP) vulnerabilities and prioritizing requirements (OPR: ASD(NII) -- 3QFY07).

3.1.7   Publish standard policies and guidance to all combatant command and Services for information assurance (IA) aspects of NetOps [OPR: ASD(HD) ASD(NII) -- 1QFY08].

3.2   **Establish GIG CND Capabilities That Support Protecting, Monitoring, Detecting, Analyzing, and Responding to Unauthorized Activity and Unintentional User Errors.**

Joint Staff Division Lead: J-6X

OBJECTIVE DETAILS: Develop the capability to resist attack and to rapidly recognize, recover and respond to attacks on the network and to information resources, ensuring the continuity of access and use by legitimate users. Establish common DOD-wide IA tool suites and capabilities to support C/S/A efforts. Work with the Enterprise Solution Steering Group (ESSG) to allocate fenced IA funds to meet critical DOD shortfalls.

Actions:

3.2.1   Update C/S/A IA tool requirements and priorities (OPR: GIG IA Portfolio (GIAP) – 3QFY07).

3.2.2   Acquire and field required defense tools to meet computer network defense (CND) capability gaps. (OPR: ESSG -- 4QFY08).

3.2.3   Complete the upgrades and hardening of secret internet protocol router network (SIPRNET) routers in C/S/A enclaves (OPR: DISA -- 2QFY07).

3.2.4   Field (i.e., initial operational capability) Enterprise Mission Assurance Support System certification and accreditation software (OPR: ASD(NII) -- 1QFY08).

3.3   **Develop a Professional CND Workforce Through Improved Training, Doctrine, tactics, techniques and procedures (TTPs), and Exercises.**

Joint Staff Division Lead: J-6X

OBJECTIVE DETAILS: Beyond technical solutions, it is vital to train personnel in all aspects of IA across the C/S/As. Incorporation of IA and CND in exercise planning and execution ensures effective evaluation of DOD capabilities and promotes realistic training for IA professionals.

Actions:

3.3.1   Build the DOD premiere IA exercise, expand C/S/A participation, integrate into USSTRATCOM's Global Storm, and establish long-term exercise schedule. (OPR: Joint Staff/J-6X -- 4QFY07).

3.3.2   Implement IA awareness and education for commanders and senior leaders (OPR: National Defense University -- 4QFY07).

3.3.3   Fill 70 percent of IA positions with certified personnel in accordance with DODI 8570 (OPR: C/S/A -- 1QFY09).

3.3.4   Develop exercise tests and training for administrators to detect and react to computer attacks (OPR: USSTRATCOM -- 2QFY07).

3.3.5   Develop common TTPs to include IA aspects of network operations (NetOps), to recognize attacks, eliminate the potential for the illegitimate exfiltration or modification of data, and rapidly recover from attack (OPR: USJFCOM -- 3QFY07).

3.3.6   Build a DOD-wide IA and CND training range to facilitate IA workforce proficiency (OPR: USD(I) -- 4QFY08).

3.4   **Define New Encryption and Data Technologies and Procedures to Maintain the Confidentiality and Integrity and/or Non-Repudiation of Information and Provide Highly Available ES.**

Joint Staff Division Lead: J-6X

OBJECTIVE DETAILS: The consolidation of communications security (COMSEC) management, distribution and training into a joint standard will alleviate disparate COMSEC management procedures across the Services. Integrating CIP into operational processes will ensure highly available enterprise services are on hand for key warfighter operations. Modernized encryption and data technologies are required to enhance confidentiality and integrity and/or non-repudiation.

Operational necessities, current and projected, demand IA solutions and their infrastructures achieve this transformation, while simultaneously overcoming algorithm aging and logistics sustainability issues.

Actions:

3.4.1　Establish common joint COMSEC procedures (OPR:　National Security Agency (NSA) -- 2QFY07).

3.4.2　Develop the specifications for High Assurance Internet Protocol Encryptor (HAIPE) key modernization to include HAIPE-to-HAIPE keying, over the network keying and zeroization, compromised key list, and keymat distribution (OPR:　NSA -- 2QFY07).

3.4.3　C/S/A implement Electronic Key Management System software at all Tier 2 locations (OPR:　NSA -- 2QFY07).

3.4.4　Deliver a Public Key Infrastructure CPD and achieve Milestone C for Capability Increment I (OPR:　NSA -- 4QFY07).

3.4.5　Complete all required Joint Capabilities Integration and Development System (JCIDS) and Major Automated Information System documentation and approvals for key management infrastructure Capability Increment III (OPR:　NSA -- 2QFY07).

3.4.6　Document a process to accomplish combatant command CIP assessment and guide combatant commanders to possible funding avenues (OPR:　J-6X -- 1QFY07).

3.5　**Establish Methods and Measures of Effectiveness to Identify and Periodically Assess DOD Ability to Secure the Network.**

Joint Staff Division Lead:　J-6X

OBJECTIVE DETAILS:　Build a comprehensive set of IA and CND metrics that measure the strategic health of the network.　These activities will result in the ability to provide a DOD-wide picture of our IA and CND posture and react to shortfalls.　To best assess IA, the community must institutionalize the collation and analysis of DOD IA and CND assessment activities.　The results of the assessments must be considered and folded into DOD decision-making processes.

Actions:

3.5.1　Develop an assessment framework to collect disparate assessment, evaluation, and inspection results into a coherent fused database. (OPR: DOT&E, Joint Staff/J-6X -- 2QFY07).

3.5.2　Develop, coordinate, and publish IA and CND metrics for use in readiness and security assessments (OPR:　DIAP -- 3QFY07).

3.5.3　Establish process to address measured network shortfalls and make appropriate DOTMLPF changes (OPR:　USJFCOM -- 4QFY07).

3.5.4 Develop and coordinate changes to DOD vulnerability assessments to incorporate communications systems CIP into existing IA assessments (OPR: ASD (HD) ASD(NII) -- 3QFY07).

3.5.5 Incorporate and assess IA activities in all joint exercises; address shortfalls and determine process to track IA and CND events in joint exercise planning conferences and after action reports (OPR: USSTRATCOM (JTF-GNO) -- 1QFY07).

3.6 **Develop Acquisition Strategies That Improve Network Security Through System Assurance Measures.**

Joint Staff Division Lead: J-6X

OBJECTIVE DETAILS: Software and hardware assurance relates to the level of confidence felt in software applications and the hardware platforms that run them; that they function as intended and are free of vulnerabilities, either intentionally or unintentionally designed or inserted during the lifecycle. System assurance describes the combination of both software and hardware assurance. Most US DOD capabilities depend on systems developed in the commercial sector. These systems are mission critical not only for the DOD prime mission of securing our Nation, but also for protecting critical infrastructure at home and abroad. US enemies (including nation states, terrorists, criminals and rogue software and hardware developers) may gain control of DOD systems through supply-chain opportunities (intentionally embedding malicious code) or by remotely exploiting software that is vulnerable through quality defects. As the Department acquires, manages and employs complex, software-intensive systems, it must manage the risks associated with these vulnerabilities. Ultimately, the Department needs an acquisition process that allows decision makers to balance system risk (threat) with affordability, technical feasibility and operational capability.

Actions:

3.6.1 Develop process and guidance to ensure purchased hardware and software achieves a high level of assurance in its security (OPR: ASD(NII) -- 1QFY07).

3.6.2 Synchronize the implementation of the components of the GIAP with the IA components of warfighting mission area (WMA) Programs (OPR: GIAP -- 2QFY07).

3.6.3 Develop a GIG component acquisition strategy for pre-configuration and ensuring the security configurations are maintained throughout the product lifecycle. (OPR: ASD(NII) -- 2QFY07).

3.7 **Assess and improve procedures and processes required to maintain shared situational awareness and monitor the performance, operational status, and security of the GIG.**

Joint Staff Division Lead: J-6Z

OBJECTIVE DETAILS: Standardized reporting procedures and processes are necessary so that everyone who manages and defends the network can achieve a common understanding of the status of the GIG.

Actions:

3.7.1   Formalize and sustain process for reporting network intrusions, incidents, IA and vulnerability alert compliance, and corrective actions (OPR: USSTRATCOM (JTF-GNO) -- 3QFY07).

3.7.2   Establish and sustain single network common operational picture (COP) toolset for the GIG (OPR: DISA –3QFY07).

GOAL 4 -- ACCELERATE INFORMATION SHARING:

4.1   Establish a DOD/Interagency Information Sharing Environment That Includes Common Standards, Architecture, and Culture.

Joint Staff Division Lead: J-6X

OBJECTIVE DETAILS: It is necessary to codify the specific warfighting information sharing requirements, policies, culture and material solutions as prerequisites to the effective implementation of the National Security Strategy and National Response Plan. A key component of this is the development of a DOD/interagency information sharing environment to address policy, processes and procedures for the sharing of critical information with joint and interagency partners. Without an articulate, robust strategy, interoperable and interdependent capabilities will not be realized.

Actions:

4.1.1   Publish and implement information sharing strategy with DOD-wide scope that identifies capability gaps, sets standards and prioritizes and unifies efforts (OPR: ASD (NII) -- 2QFY07).

4.1.2   Formally establish a DOD/interagency information sharing working group (OPR: ASD(NII) -- 1QFY07).

4.1.3   Develop interagency COP and collaboration standards (OPR: USJFCOM and USNORTHCOM -- 4QFY07).

4.1.4   Support the National Guard Bureau's Standing Joint Force Headquarters -- State initiative implementation (OPR: USNORTHCOM -- 2QFY07).

4.1.5   Maximize annual participation with Coalition Warrior Interoperability Demonstration (CWID) to identify potential interoperability solutions in support of homeland defense missions (OPR: USJFCOM -- 4QFY06).

4.2   Refine KM Capabilities Required Across the DOTMLPF Resource Spectrum and Publish Results in Appropriate Doctrine, Policy, or Concept Document.

Joint Staff Division Lead: J-6A

OBJECTIVE DETAILS: In order for JNO to create warfighting effects, the NCOE JIC and current JCA effort define a new Tier 2 capability set for knowledge management (KM). KM is defined as "the systematic process of discovering, selecting, organizing, distilling, sharing, developing and using information in a social domain context to improve warfighter effectiveness." KM stems from the premise that an organization's competitive advantage exists in how well and how widely that organization uses and enhances its own collective knowledge. Improvement to technical networking capabilities alone, while desirable, amount to little more than "better comms." In order for the network to create new effects and thereby achieve the truly transformational capabilities envisioned by the "GIG" construct, the network must rapidly respond to ever changing operational priorities and needs. While future network managers will have tools to dynamically allocate network resources such as bandwidth, a mechanism is needed to bridge the current gap between rapidly changing mission needs and the priorities network managers follow to meet these needs. This mechanism is a set of tools and techniques collectively referred to as KM. Many organizations inside and outside of the military are working on various facets of KM, but no central effort is currently underway within the Department of Defense to discover, refine and standardize the military application of this new function. Over the next 2 to 5 years, it is critical that the Department establish a process to rapidly apply emerging commercial tools and techniques through experiments and other pathfinder efforts and then determine a means to standardize these and conduct the necessary joint force-wide training to make effective use of this new capability area.

Actions:

   4.2.1 Develop and submit KM candidates and priorities for experimentation (OPR: Joint Staff/J-6A – 1QFY07).

   4.2.2 Develop enabling construct for KM capabilities for use in JCA and concept development and revision (OPR: Joint Staff/J-6A – 2QFY07).

   4.2.3 Identify defense technical objectives for KM functions (OPR: ASD(S&T) – 2QFY07).

4.3 Accelerate the Development of cross domain solutions (CDS) to Move Information Across Security Classification and National Boundaries by Consolidating Program Efforts and Refining Certification and Accreditation Processes.

Joint Staff Division Lead: J-6X

OBJECTIVE DETAILS: The Department of Defense and IC require the cross-domain management office (CDMO) to accelerate the development, certification, evaluation and testing of potential cross-domain solutions. The CDMO will leverage like requirements, technology and funds for a more efficient process of CDS development between the Department and intelligence community (IC).

Actions:

4.3.1 Determine the structure, develop a program management plan, and establish a CONOPS for the combined CDMO (OPR: ASD(NII) -- 3QFY06).

4.3.2 Develop and implement CDMO program strategy (OPR: NSA -- 1QFY07).

4.3.3 Identify CDS capabilities and document in JCIDS process (OPR: NSA -- 4QFY07).

4.3.4 Field common DOD and IC CDS to meet defined capabilities (OPR: NSA -- 4QFY09).

4.4 Improve MNIS Capability by Sustaining Current Operational Systems, Transitioning to Enterprise Architecture, and Supporting the Development of Objective Information Sharing Capability.

Joint Staff Division Lead: J-6X

OBJECTIVE DETAILS: It is necessary to codify the specific warfighting information sharing requirements, policy, culture and material solutions as a precursor to the implementation of the National Security Strategy and National Response Plan.

Actions:

4.4.1 Publish DOD memo establishing the Navy as executive agent for objective MNIS (OPR: ASD(NII) -- 1QFY07).

4.4.2 Publish Chairman of the Joint Chiefs of Staff Instruction (CJCSI) establishing processes to identify and respond to MNIS current operational network requirements (OPR: Joint Staff/J-6 -- 3QFY06). -- <u>COMPLETED</u>

4.4.3 Align GIG IA Capability Roadmap for Assured Information Sharing, Joint Battle Management Command and Control (JBMC2) Roadmap, multinational chapter and objective multinational information sharing (MNIS) capability (OPR: Navy -- 4QFY06).

4.4.4 Develop and implement a MNIS Transition Plan. (OPR: DISA -- 4QFY07).

4.4.5 Develop initial capability documents for an objective MNIS capability in accordance with the JCIDS and/or acquisition process. (OPR: Navy -- 2QFY08).

4.4.6 Develop policy and technical solutions to support expanded allied information sharing capabilities (OPR: ASD(NII) -- 2QFY07).

4.4.7 Develop process to expand Service requirements and acquisition community involvement and participation with the CWID program (OPR: Joint Staff/J-6 -- 4QFY07).

4.4.8 Develop a process to deliver CWID products and processes to operational forces within 6 to 12 months post-CWID execution (OPR: USJFCOM -- 4QFY07).

4.4.9 Expand GRIFFIN capabilities to include web browsing, chat, and common operational picture (COP) dissemination among all participating nations (OPR: Joint Staff/J-6X -- 4QFY08).

4.4.10 Provide the Multinational Interoperability Council nations a joint, combined, and integrated communications system to achieve mutual situational awareness at the strategic and operational levels (OPR: Joint Staff/J3 -- 4QFY07).

4.4.11 Transition Combined Federated Battle Laboratories Network (CFBLNet) to an IPv6 compliant network (OPR: DISA -- 1QFY07).

4.4.12 Establish a performance measurement benchmark enclave to test objective MNIS initiatives on CFBLNet (OPR: DISA -- 1QFY07).

4.4.13 Determine feasibility of expanding CFBLNet mission to include training opportunities (OPR: Joint Staff/J-6X -- 1QFY07).

GOAL 5 -- SYNCHRONIZE DELIVERY OF NETWORK CAPABILITIES:

5.1 **Advance Communication System Engineering and Integration to Improve Interoperability and Supportability of information technology (IT) and National Security Systems (NSS).**

Joint Staff Division Lead: J-6I

OBJECTIVE DETAILS: The ASD(NII)/DOD CIO E2E systems engineering (SE) Advisory Activity is realigning its responsibilities with the newly stood-up DISA E2E SE office. The DOD Chief Information Officer (CIO) provides policy and oversight, while the joint community assists DISA with the GIG E2E SE implementation and technical standards documentation. GIG architectures and standards must be synchronized with the JCIDS and Information Support Plan (ISP) assessment processes and the modeling, simulation and testing environments.

Actions:

5.1.1 Integrate the GIG E2E SE efforts with existing testing, modeling, simulation, and engineering activities (OPR: ASD(NII)/ DISA -- 2QFY08).

5.1.2 Ensure the DOD Architecture Framework Version 1.5 addresses the WMA concerns (OPR: ASD(NII) -- 1QFY07).

5.1.3 Develop a process to federate and integrate disparate architectures (OPR: ASD(NII) (FJAWG) -- 1QFY08).

5.1.4 Synchronize/update interoperability and supportability policy between DOD CIO and the Joint Staff (OPR: ASD(NII) -- 3QFY07).

5.2 **Complete Initial net-centric operational environment (NCOE) Efforts to Define Capabilities for First Tactical Mile Users and Leverage This Work to Create a**

Portfolio Management Concept for Integrated Capability Delivery Based on an Enterprise-Wide JNO Taxonomy.

Joint Staff Division Lead: J-6A

OBJECTIVE DETAILS: A tiger team was formed in 2004 to identify the challenges in fielding critical enabling network (e.g, NCOE) capabilities and to develop potential options to deliver synchronized capabilities. In February 2005 the Joint Chiefs of Staff endorsed the NCOE Project way-ahead, directing the development of an NCOE JIC with illustrative CONOPS; development of a strategy, terms of reference (TOR) and implementation roadmap; and review and assessment of management and governance options for achieving the NCOE. The NCOE JIC received JROC approval in October 2005 and a subsequent Net-centric Functional Capabilities Board (NC-FCB) -led capability-based assessment (CBA) is scheduled for completion in 2006 with approval of a Joint Capabilities Document (JCD). ASD (NII) has completed the implementation roadmap and TOR. When combined with the NCOE JCD, these efforts will provide an initial analytical foundation for net-centric capabilities.

As a result of the 2006 QDR Report guidance to develop joint capability portfolios, the Deputy's Advisory Working Group (DAWG) directed a JNO portfolio management experiment with ASD (NII) and Commander, USSTRATCOM, assigned as co-leads. This effort is anticipated to complete the work initiated under the NCOE project to develop management and governance options for synchronized capabilities delivery. This broad initiative will expand the warfighter-focused NCOE work into enterprise-wide capabilities-based planning recommendations using the JNO lexicon and taxonomy developed under the JCA initiative. Version 2 of the JNO Joint Functional Concept will further mature and expand the JNO lexicon and taxonomy to provide a common, community-wide vocabulary and further define joint net-centric operations environment capabilities and lessons learned from the CBA.

Actions:

5.2.1   Develop and refine NC FCB Capability Portfolio from capability gap assessments, concepts documents, and other sources. (OPR: Joint Staff/J6A -- 3QFY07).

5.2.2   Update applicable JNO concepts documents based upon evolving capability portfolio results (OPR: J6A -- continuously).

5.2.3   Conduct semi-annual capability gap assessments using analytical tools (OPR: Joint Staff/J6A -- semi-annual process based upon J8 guidance)

5.2.4   Compare NC FCB capability portfolio results with other ongoing portfolio efforts and align as necessary (OPR: Joint Staff/J6A -- ongoing)

5.3   **Create a Net-Centric Operations Test Environment for Joint, Multinational, Interagency, and Inter-Governmental Testing.**

Joint Staff Division Lead: J-6I

OBJECTIVE DETAILS: The net-centric test environment will institutionalize common tools, interfaces and network capabilities to provide realistic testing and evaluation in a joint operational context. The Department of Defense requires a persistent testing, modeling and simulation capability to facilitate evaluation of net-centricity early and throughout a program's development cycle. The Joint Staff/J-6 supports OSD efforts to build standard test facilities and capabilities as it leads DOD efforts to merge the many disparate test networks (e.g., DREN, DISN-LES) into a seamless DOD-wide enterprise.

Actions:

5.3.1 Converge test networks to a common standard in order to effect a joint distributed net-centric testing environment (OPR: DOT&E -- 2QFY09).

5.3.2 Incorporate SecDef-approved Testing in a Joint Environment (TJE) Roadmap and the Joint Mission Environment Test Capability (JMETC to complete the draft TJE Implementation Plan (OPR: DOT&E -- 2QFY07).

5.3.3 Document the net-centric testing environment policy and procedures in a TJE CJCSI incorporating the JMETC and TJE Implementation Plan (OPR: Joint Staff/J-6I -- 4QFY07).

5.4 **Define Common Modeling and Simulation (M&S) Tools That Support and Enable JNO.**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: Network Warfare Simulation (NETWARS) is the joint communications M&S program. It is being developed by DISA, in conjunction with Joint Staff/J-6, to provide communications planners and analysts with the capability to validate communications support plans, analyze existing and proposed network architectures and predicatively evaluate the performance of new communications devices and applications. NETWARS is being socialized with the Services and combatant commands as the common communications system M&S tool.

Actions:

5.4.1 Establish and maintain a JNO M&S governance structure (OPR: ASD(NII) -- 3QFY07).

5.4.2 Develop and enforce communication device model standards and interoperability requirements. (OPR: DISA -- 1QFY08).

5.4.3 Educate the joint community on the value of JNO M&S (OPR: Joint Staff /J-6C -- 1QFY09).

5.5 **Manage the WMA IT Portfolio Investment Analysis to Provide Prioritization and Integration Recommendations to the Capabilities, Acquisition, and Budget Process Decision Makers.**

Joint Staff Division Lead: J-6I

OBJECTIVE DETAILS: Joint Staff/J-6 will use IT portfolio management (PfM) to improve IT and NSS investment decisions by objectively assessing individual systems as groups of investments. In completing this work, J-6 will improve synchronization of JCIDS, Defense Acquisition System (DAS) and planning, programming, budgeting and execution (PPBE) decisions concerning individual IT and NSS investments. There will be opportunities to reduce duplicative IT and NSS efforts and re-invest resources for other capabilities. IT portfolio management (PfM) will allow objective assessments and prioritization of IT and NSS systems within the IT domain portfolios. Finally, J-6 will facilitate better IT and NSS management of data collection, distribution and use across the Joint Staff.

Actions:

5.5.1   Field and maintain WMA IT PfM support to the respective J-directorates responsible for IT portfolio domains (OPR: Joint Staff/J-6I -- 1QFY07).

5.5.2   Prioritize WMA investments (OPR: Joint Staff/J-6I -- 1QFY07).

5.5.3   Publish Chairman of the Joint Chiefs of Staff (CJCS) guidance to implement WMA IT PfM (OPR: Joint Staff/J-6I -- 2QFY07).

5.5.4   Synchronize WMA PfM with other DOD portfolio management initiatives (OPR: Joint Staff/J-6I -- 3QFY07).

5.6 **Advocate Communication Systems Training for Joint Personnel to Enhance JNO.**

Joint Staff Division Lead: J-6 DAG

OBJECTIVE DETAILS: The impact of JNO continues to exceed the training requirements of combatant and joint task force (JTF) commanders. Current efforts, ranging from enhancing spectrum management to developing the Joint C4 Planners Course, address existing voids. Ensure existing training presents the appropriate content and possesses the correct oversight to best serve the joint force. Look to present actions and potential engagements to both update today's training and develop new opportunities.

Actions:

5.6.1   Develop training directive to provide policy and guidance. Ensure core competencies, standards, scope and charter of programs meet training requirements (OPR: Joint Staff/J-6 DAG -- 3QFY07).

5.6.2   Accelerate development and implementation of Joint C4 Planners Course (OPR: USJFCOM, Joint Staff/J-6 DAG -- 3QFY07).

5.7 **Employ a Rigorous and Repeatable Analytical Process to Improve Capability Assessments and Gap Analysis.**

Joint Staff Division Lead: J-6A

OBJECTIVE DETAILS: Both JCIDS and the application of JCIDS analysis tools within the NC FCB continue to evolve. Even as awareness, acceptance and use of JCIDS spreads, the shortfalls in application of the processes, particularly with respect to the ability to make rigorous capability-trade recommendations, are increasingly problematic. To address these shortfalls, Joint Staff/J-6A will initiate two new efforts: 1) educate the NC FCB stakeholders on the use of JCIDS; and 2) establish guidelines for capability portfolio assessments using emerging analysis information and tools.

Actions:

5.7.1   Develop and conduct training on capability portfolio management   (OPR: Joint Staff /J6A -- ongoing).

5.7.2   Review and refine J6A's internal analytical processes for capability portfolio management, based upon Joint Staff J8 direction (OPR: Joint Staff/J6-A ongoing).

5.8   **Collaborate With Allied and Coalition Partners to Develop and Implement Policies, Procedures and IT Standards That Promote Combined Interoperability.**

Joint Staff Division Lead: J-6B

OBJECTIVE DETAILS: Combined interoperability is a critical enabler to seamless, reliable, network-centric operations. Improving combined interoperability of data, applications and systems is paramount. Combined interoperability does not happen by chance; it has to be planned and paid for, up-front. Steps taken in recent years are improving combined interoperability, but much work remains.

Actions:

5.8.1   Deliver the cross-certification of Australia, Canada, New Zealand, United Kingdom, United States, (AUSCANNZUKUS) National Defense public key infrastructures (PKIs) (OPR: ASD(NII), PKI PMO -- 3QFY07).

5.8.2   Deliver a strategy that guides the development of C4 capabilities in order to support the command and control (C2) of AUSCANNZUKUS forces [OPR: ASD(NII) – 3QFY07].

5.8.3   Deliver Allied Joint Publication-6, Allied Joint Doctrine for Command and Control Information Systems to North Atlantic Treaty Organization (NATO) for ratification [OPR: USJFCOM J7 – 1QFY08].

5.8.4   Establish international memorandum of understanding/memorandum of agreement and nationally ratify Allied Communication Publications (ACP) and NATO Standardization Agreements to further enhance C4 interoperability [OPR: ASD(NII), CJCS, DJ6 – 1QFY07].

GOAL 6 -- TRANSFORM GIG ENTERPRISE MANAGEMENT AND ENHANCE ELECTROMAGNETIC SPECTRUM ACCESS:

6.1 **Develop Policy and Governance Structure to Facilitate E2E Enterprise Management.**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: ASD (NII), Joint Staff/J-6, USSTRATCOM and JTF-GNO will continue to refine and develop NetOps policy, guidance and TTPs along with GIG C2, situational awareness and defense capabilities. Control and visibility of the GIG is currently Service-centric; move toward a regional combatant command-centric view. Encourage the use of common and compatible tools sets for GEM and GND. Develop a common data strategy to enable GIG content staging/ information dissemination management and set in place processes and procedures to affect GIG configuration management.

Actions:

6.1.1 Define and maintain GIG policy and governance [OPR: ASD(NII) -- 4QFY07].

6.1.2 Define and maintain NetOps operational construct [OPR: USSTRATCOM -- 4QFY07]

6.1.3 Define and maintain effective GIG Configuration Management policy and governance [OPR: ASD(NII) -- 4QFY07]

6.2 **Advocate Enterprise Management Capabilities and Solution(s) Congruent With Direction of Emerging DOD Policy and Guidance.**

Joint Staff Division Lead: J-6C

OBJECTIVE DETAILS: Move toward solutions for GIG EM that are compatible with other GIG systems and with DOD policy. Ensure that current joint programs (such as Joint Network Management System (JNMS)) support DOD policy and effective GEM. Support the NCOE tasks that attempt to bring together, under one program office, several of the major GIG programs of record (including JTRS, Transformational Communications Satellite (TSAT), GIG Bandwidth Expansion and JNMS). Support ongoing GIG system engineering efforts to put into place the tool sets required to accomplish GEM.

Actions:

6.2.1 Develop and publish the joint NetOps architecture for C/S/As (OPR: USSTRATCOM -- 1QFY07).

6.2.2 Analyze NCOE CBA for gaps that could drive the need for a capabilities document for GIG Network Management and draft decision paper (OPR: USSTRATCOM -- 2QFY07).

6.2.3 Draft and publish digital rules of engagement for combatant commands (OPR: DISA -- 2QFY07).

6.2.4 Determine future of JNMS as a program of record (POR) and advocate its use to C/S/As (OPR: Joint Staff/J-6C -- 4QFY06).

6.3 **Promote Electromagnetic Spectrum Access and Awareness for DOD Forces Operating in Joint, Multinational, Interagency, and Inter-Governmental Environments.**

Joint Staff Division Lead: J-6B

OBJECTIVE DETAILS: Obtaining access to the electromagnetic spectrum to support recent military operations has been impacted by issues such as securing host nation permission, spectrum access loss due to worldwide spectrum access reallocation, increased competition from commercial interests and the international frequency assignment process. Additionally, awareness of the electromagnetic spectrum -- specifically of the requirements for gaining access to this vital resource -- have long been an afterthought, especially within the acquisition and operational communities. In order to support JNO, the joint community must advocate proper enforcement through adherence to national and international guidelines, protect current DOD electromagnetic spectrum allocations against encroachment and improve and develop electromagnetic spectrum policy. Focus must also shift to education and awareness throughout the operational and acquisition communities, in order to highlight the criticality of electromagnetic spectrum resources.

Actions:

6.3.1 Develop policy for DOD 5000 Series publication modifications to ensure spectrum requirements are addressed, implemented, and enforced at each milestone, until positive spectrum supportability is achieved (OPR: USD(AT&L) -- 4QFY07).

6.3.2 Develop strategies and policies to ensure DOD access to electromagnetic spectrum (OPR: ASD(NII) -- 4QFY07).

6.3.3 Analyze the spectrum management processes required for JNO (OPR: Joint Staff/J-6B -- 4QFY08).

6.3.4 Develop an outreach program for the operational and acquisition communities to improve electromagnetic spectrum awareness (OPR: DISA -- 2QFY08).

6.4 **Establish a Standardized Electromagnetic Spectrum Management Capability to Support DOD, Multinational, Interagency, and Inter-Governmental Operations.**

Joint Staff Division Lead: J-6B

OBJECTIVE DETAILS: In the past, electromagnetic spectrum management within the United States and its possessions has been accomplished for the Department

of Defense by the Military Departments. Outside of the United States and its possessions, electromagnetic spectrum management has been accomplished by the geographic combatant commands. To accommodate the future roles and responsibilities of USNORTHCOM within the United States, as well as partnerships with multinational mission partners outside the United States and its possessions, the spectrum management process now needs to be re-evaluated. This re-evaluation includes advocating for the development of an overarching electromagnetic spectrum management tool suite to support joint operations, including real-time and near-real-time detection, identification and update of a joint electromagnetic spectrum management database for all new emitters that support deconfliction and frequency assignments. Additionally, transformation within the electromagnetic spectrum management arena includes the development and acquisition of electromagnetic spectrum-dependent technology to support a continuously increasing electromagnetic spectrum demand.

Actions:

6.4.1   Develop a Defense Spectrum Management Architecture that supports joint electromagnetic spectrum management, including assessment of legacy capability trade-offs (OPR: DISA -- 4QFY08).

6.4.2   Develop a DOD electromagnetic spectrum data standard and data exchange format that supports automated data exchange (OPR: DISA -- 4QFY08).

6.4.3   Continue to develop the policies and procedures that support the combatant commands' electromagnetic spectrum management and supportability. [OPR: USNORTCOM -- 4QFY07]

6.5   **Develop a Cadre of Professional Electromagnetic Spectrum Management Personnel (Military and Civilian) Capable of Meeting the Demands Across the Continuum of Operations.**

Joint Staff Division Lead: J-6B

OBJECTIVE DETAILS: A cadre of qualified managers to fill joint electromagnetic spectrum management positions and to support electromagnetic spectrum management elements with multinational organizations and JTFs does not exist today. The Services need to establish and mature career field specialties in the spectrum management arena. Services must also establish efficient management processes for this undermanned, high demand career field. The maintenance of qualified electromagnetic spectrum career field personnel includes updating existing electromagnetic spectrum management training courses, tracking careers and assignments and defining wartime and peacetime proficiency requirements.

Actions:

6.5.1   Establish career field for electromagnetic spectrum managers in each of the Services (OPR: Services -- 2QFY08).

6.5.2   Determine the adequate number and qualification level of electromagnetic spectrum managers trained to support a JTF (OPR: USJFCOM -- 2QFY08).